

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/824,330	04/02/2001	James Michael Nelson	56081USA8A.002	9412
32692	7590 06/30/2005		EXAMINER	
3M INNOV PO BOX 334	ATIVE PROPERTIES	HANDY, D	HANDY, DWAYNE K	
ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Applicant(e)  Office Action Summary  Application No.  Office Action Summary		•							
Examiner Dwayne K. Handy 1743  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Repty  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of term may be available under the previsions of 3°C FR 1.136(a). In or event, however, may a reply be timely filled after SIX (b) MONTHS from the mailing date of this communication.  If No period for regly is specified above, the maximum stability period will apply and will eight SIX (b) MONTHS from the mailing date of this communication.  If No period for regly is specified above, the maximum stability period will apply and will eight SIX (b) MONTHS from the mailing date of this communication.  Fallute to regive is specified above, the maximum stability period will apply and will equip SIX (b) MONTHS from the mailing date of this communication. Second BANDCARD (SU S.C. \$ 133).  Status  1 Second SIX (so the specified above, the maximum stability period will apply and will equip SIX (b) MONTHS from the mailing date of this communication to second BANDCARD (SU S.C. \$ 133).  Status  1 Second SIX (so the specified above, the maximum stability period will apply and will equip SIX (b) MONTHS from the mailing date of this communication. Second SIX (so the specification is communication.  2 Status  1 Second SIX (so the specification is condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4 Second SIX (so the specification is objected to under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4 Second SIX (so the specification is objected to by the Examiner.  4 Claim(s) 1-14 Is/are rejected.  7 Claim(s) 1-15 Is/are rejected.  9 The drawing(s) filed on 1-15 Is/are rejected.  10 The drawing(s) filed on 1-15 Is/are rejected.  11 Second SIX (so the SIX (so the specified SIX (so the specifie			Application No.	Applicant(s)					
Dayme K. Handy  -The MALLING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extension of time map be available under the processine of JCTR 1.136(a). In no event, however, may a reply be timely filed  Extension of temple specified above is less then thing (30) days, as reply within the statutory minimum of thing (30) days will be considered timely.  If the period for reply specified shows is less than thing (30) days, as reply be timely filed  If the period for reply specified shows is the standary period will apply and will explice XIV (MONTHS from the satisfact or reply specified above is the standary period will apply and will explice XIV (MONTHS from the satisfact or the construction of the communication			09/824,330	NELSON ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address—Period for Repty  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Educations to time may be validable under the provision of 3 CFR 1.13(6), b. no event, however, may a reply be linely flied after 50 kg is MCNTHS from the malling date of this communication.  I NO parted for reply is specified above, the maximum attentor period with pays and will expise 100 (b) MCNTHS from the mailing date of this communication.  I NO parted for reply is specified above, the maximum attentor period will pay and will expise 100 (b) MCNTHS from the making date of this communication.  Pallure to reply within the set or extended period for reply will, by attending to become ARANDONED (58 U.S.C. § 133). Any payly reviewed by the Official grade that the malling date of this communication, even if firmly flied, may reduce any active patent term algorithms. See 37 CFR 1.794(b):  Status  1) □ Responsive to communication(s) filled on 20 May 2005.  2a) □ This action is FINAL.  2b) □ This action is FINAL.  2b) □ This action is FINAL.  2b) □ This action is non-final.  3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) □ Claim(s) 1.14 is/are pending in the application.  4a) Of the above claim(s) is/are allowed.  Claim(s) is/are allowed.  Claim(s) is/are allowed.  Claim(s) is/are allowed.  Claim(s) is/are objected to.  Claim(s) is/are objected to.  Claim(s) is/are objected to.  Claim(s) is/are objected to.  The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Application Papers  9) □ The specification is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12 □		Office Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.35(s). In an event, however, may a reply be timely filed  If the period for reply specified above, the maximum statutory period will apply and will expire 30 X (5) MONTHS from the marking date of this communication (3) and the statutory minimum of bility (20) days will be considered timely.  If NO period for reply specified above, the maximum statutory period will apply and will expire 30 X (5) MONTHS from the marking date of this communication.  Failure to reply specified above, the maximum statutory period will apply and use one in the provision of the statutory will be a status experienced above. The marking date of this communication, even if timely filed, may reduce dary experienced patent term adjustment. See 37 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on 20 May 2005.  2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-14 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5 Claim(s) is/are allowed.  6) Claim(s) is/are allowed.  6) Claim(s) is/are allowed.  7 Claim(s) is/are allowed.  8 Claim(s) is/are allowed.  9 The specification is objected to by the Examiner.  10 The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  2 Acknowledgment is made of a claim for foreign pri									
THE MALINE DATE OF THIS COMMUNICATION.  Edentists of time may be available under the proxime of 37 CFR 1.136(a). In or event, however, may a reply be timely filled other SIX (8) MONTHS from the mailing date of this communication.  If the period reply specified davor is less than this (9) days, a risk period or reply within the adultacy minimum of thirty (30) days, a risk be considered timely.  Failure is reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (25 U.S.C. § 133). Any reply received by the Office date than three medians after the mailing date of this communication, even if timely filled, may reduce any seamed patent term sejustiment. See 37 CFR 1.704(b).  Status  1) ☑ Responsive to communication(s) filled on 20 May 2005.  2a) ☐ This action is FINAL.  2b) ☑ This action is FINAL.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accoordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s)			ears on the cover sheet with the c	orrespondence ad	ldress				
1)⊠ Responsive to communication(s) filed on 20 May 2005.  2a)☐ This action is FINAL. 2b)⊠ This action is non-final.  3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)☑ Claim(s) 1-14 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)☐ Claim(s) is/are allowed.  6)☑ Claim(s) is/are rejected.  7)☐ Claim(s) is/are objected to.  8)☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)☐ The specification is objected to by the Examiner.  10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)☐ All b)☐ Some * c)☐ None of:  1.☐ Certified copies of the priority documents have been received.  2.☐ Certified copies of the priority documents have been received in Application No  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Altachment(a)  1)☑ Notice of References Cited (PTO-82)  20☐ Interview Summary (PTO-413)  Paper No(s)Mail Date	THE MAI - Extension after SIX ( - If the peric - If NO peri - Failure to Any reply	LING DATE OF THIS COMMUNICATION. s of time may be available under the provisions of 37 CFR 1.13 6) MONTHS from the mailing date of this communication. Ind for reply specified above is less than thirty (30) days, a reply do for reply is specified above, the maximum statutory period w reply within the set or extended period for reply will, by statute, received by the Office later than three months after the mailing	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered time the mailing date of this o	ly. ommunication.				
2a)  This action is FINAL. 2b)  This action is non-final.  3   Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s)  1-14 is/are pending in the application.  4a) Of the above claim(s)  is/are withdrawn from consideration.  5   Claim(s)  1-14 is/are rejected.  7   Claim(s)  is/are objected to.  8)  Claim(s)  1-14 is/are rejected.  7   Claim(s)  are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  100  The drawing(s) filed on  is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some ° C) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.	Status								
3   Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4   Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5   Claim(s) is/are allowed. 6   Claim(s) is/are rejected. 7   Claim(s) is/are objected to. 8   Claim(s) is/are objected to. 9   The specification is objected to by the Examiner. 10   The drawing(s) filed on is/are: a   accepted or b   objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11   The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12   Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)   All b)   Some * c)   None of: 1.   Certified copies of the priority documents have been received. 2.   Certified copies of the priority documents have been received in Application No 3.   Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1   Notice of References Cited (PTO-952)   Paper No(e)Mall Date Paper No(e)Mall Date	1)⊠ Re	sponsive to communication(s) filed on 20 Ma	a <u>y 2005</u> .						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)	2a)□ Th	s action is <b>FINAL</b> . 2b)⊠ This	action is non-final.						
Application of Claims  4) ○ Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed. 6) ○ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s) 1) □ Notice of References Cited (PTO-892) 2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948)	•	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the ments is							
4)	clo	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected.  7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All   b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) □ Notice of References Cited (PTO-892)  2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948)	Disposition	of Claims							
5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.	4)⊠ Cla	☑ Claim(s) <u>1-14</u> is/are pending in the application.							
Solid Claim(s) 1-14 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) □ Notice of Terifsperson's Patent Drawing Review (PTO-948)	<b>4</b> a)	4a) Of the above claim(s) is/are withdrawn from consideration.							
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)□ Cla	Claim(s) is/are allowed.							
Application Papers  9									
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	-								
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	8)∐ Cla	nim(s) are subject to restriction and/or	r election requirement.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Application	Papers							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	•	•							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	10)∐ The	))☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)									
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	11)[_] The	e oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P	TO-152.				
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	Priority und	er 35 U.S.C. § 119	•						
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  4) Interview Summary (PTO-413) Paper No(s)/Mail Date.	a)□ <i>l</i> 1.[ 2.[	b) Some * c) None of:  Certified copies of the priority documents  Certified copies of the priority documents  Copies of the certified copies of the priori	s have been received. s have been received in Applicat ity documents have been receive	ion No	l Stage				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date	* See			ed.					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date	Attachment(s)								
Paper No(s)/Mail Date 6) Other:	1) Notice of 2) Notice of 3) Information	Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F	ate	O-152)				

Application/Control Number: 09/824,330

Art Unit: 1743

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, applicant has broadly claimed a method of making a combinatorial library. The method includes the step of "introducing **one** or more components into the plug flow reactor. While the Examiner understands how more than one compound may react at various conditions to form the library, but it is unclear to the Examiner how the **library** of compounds may be formed if only one compound is used. If only one compound is used, then varying certain properties such as temperature may alter the rate of reaction or the amount of product formed – but not the identity of the product itself.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 09/824,330 Page 3

Art Unit: 1743

3. Claims 1-4, 6 and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergh et al. (6,749,814). Bergh teaches a chemical processing system for combinatorial chemistry (col. 3, lines 15-20). PFR and CSTR reactor modeling is disclosed in column 12, lines 35-65; column 37, lines 3-17. The passage from column 12 also includes a recitation of providing passive mixers. Bergh teaches varying a wide variety of variables including residence time, temperature, starting materials, pressure, mixing and reaction yield (col. 7, lines 1-14; col. 13, lines 1-17; column 22, lines 20-60; col. 43, line 40 – col. 45, line 27). Bergh recites use of the device in polymerization in column 18, lines 54-67.

## Inventorship

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 09/824,330 Page 4

Art Unit: 1743

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al. (6,749,814) in view of Priddy et al. (4,572,819). Bergh teaches every element of the method of claims 5 and 7 except for the use of an extruder in the reaction. Priddy et al. teach an apparatus for anionic polymerization wherein the molecular weight of the polymer is closely controlled. In Example 2, Priddy discloses the use of an extruder in making their polymer. The extruder is used to remove the polymer from the reactor in strand form so that the polymer may be examined or used. It would have been obvious to one of ordinary skill in the art to combine the use of an extruder with the method of Bergh. Extruders are commonly used to remove solid

Application/Control Number: 09/824,330 Page 5

Art Unit: 1743

materials during the formation of polymers from liquid precursors. It would be advantageous to use an extruder for removal of products in a continuous system for examining reaction products.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al. (6,749,814) in view of Citron et al. (6,586,541). Bergh teaches every element of claims 13 and 14 except for a step-growth or coordination polymerization and the use of a metallocene catalyst. Citron et al. teach a process for the production of polyolefin copolymers in a plug flow reactor (col. 5, lines 21-48). As stated by Citron in column 10, the preferred catalyst for the process of Citron uses a metallocene catalyst. It would have been obvious to one of ordinary skill in the art to combine the use of the metallocene catalyst from Citron with the teachings of Bergh. One would add the metallocene catalyst to perform copolymerizations as described by Citron.

#### Response to Arguments

8. Applicant's arguments/submission with respect to the claims rejected under Bergh et al. (US 2002/0170976) have been considered but are moot in view of the new ground(s) of rejection. Applicant has submitted information in a declaration that is sufficient to overcome the previous rejection under Bergh (US 2002/0170976). This rejection is removed. Claims 1-4, 6 and 8-12 are now rejected under a new Bergh reference having an earlier effective filing date.

Application/Control Number: 09/824,330

Art Unit: 1743

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. These references of Bergh et al. (6,737,026; 6,890,493;

6,902,924) also contain the teachings of the Bergh reference used in the rejection.

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dwayne K. Handy whose telephone number is (571)-

272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DKH June 20, 2005 Jill Warden
Supervisory Patent Examiner
Technology Center 1700

Page 6